

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference A-157187	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB 03/03450	International filing date (<i>day/month/year</i>) 23.07.2003	Priority date (<i>day/month/year</i>) 23.07.2003
International Patent Classification (IPC) or both national classification and IPC B65D43/02		
Applicant PAPER, S.A. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 8 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 13.01.2005	Date of completion of this report 02.11.2005
Name and mailing address of the international preliminary examining authority: <div style="display: flex; align-items: center;"> <div> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div> </div>	Authorized Officer Visentin, M Telephone No. +49 89 2399-2614



INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

International application No. PCT/IB 03/03450

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-6 received on 17.01.2005 with letter of 13.01.2005

Claims, Numbers

1-13 filed with telefax on 19.08.2005

Drawings, Sheets

1-3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/B 03/03450**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	1-13
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-3
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 03/03450

1. Reference is made to the following documents:
D1: FR-A-2 811 638
D2: US-A-1 596 367
2. Both the documents D1 and D2 are regarded as being the most relevant prior art to the subject-matter of independent claim 1. They disclose containers of general nature comprising a base and a lid, including coupling means according to the features which are defined in the preamble of claim 1.
 - 2.1 The container defined in claim 1 distinguishes from the known object in that:
 - the base and the lid are dish-shaped and both are formed of at least one layer of cardboard (see characterizing portion of claim 1).
 - 2.2 These particular features are aimed to solve the problems of providing a container especially adapted to deliver cooked pizzas which is:
 - particularly economical in construction (cardboard being a material of reduced costs of manufacturing);
 - and
 - practical in use because the particular dish shape of base and lid can transform the container in useful dishes for the delivered product.
3. The available prior arts fails to give any indication leading to the arrangement suggested by the invention. Thus the above combination of features is considered as involving an inventive step (Article 33(1) (3) PCT).
4. The dependent claims define additional features of the container.

IAP20 Rec'd FCT/PTO 23 JAN 2006

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CONTAINER FOR ~~FOOD~~ PIZZAS AND THE LIKE

The present invention refers to a container ~~for~~
~~food, especially designed, although not only~~ for pizzas
5 and the like, formed by a base and a lid that are coupled
together.

BACKGROUND OF THE INVENTION

10 Current pizza containers are made up of a base
of corrugated cardboard sheet and a lid coupled over it. As
the container is made from only one sheet, the lid is
joined to the base.

This type of container has various drawbacks.
15 Firstly, it is very common that the container with the
recently cooked pizza inside is placed directly onto the
table, and on opening the container the space that the lid
takes up can be a real nuisance.

Furthermore, they also take up a lot of
20 transport and storage space, as although they are made up
of only one sheet, the dimensions of it are quite large.

Another drawback is the time it takes to
assemble each container. The time required for assembling
the containers means that usually a certain amount is
25 mounted and then stored, which means they occupy even more
space.

There is another type of containers made of
sheet material, preferably cardboard, which are formed of a
base and a lid which are coupled together. The coupling
30 between the base and the lid is made by fitting the lid
into the top part of the base. However, this type of
containers needs some kind of seal or the like, as without
it the container can come open if it is accidentally
tilted.

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DESCRIPTION OF THE INVENTION

With the container of the invention all the
aforementioned disadvantages are eliminated, and present
5 other advantages described below.

The ~~food~~^{pizza} container of the invention comprises
two pieces consisting of a base and a lid which can be
coupled together, both the lid and the base being made of
at least one layer of sheet material; and it is
10 characterized in that the coupling means between the lid
and the base are formed by a rim, provided on the edge of
one of the pieces of the container, which defines a C-shape
cavity, a complementary flange provided in the edge of the
other piece of the container fitting inside said cavity.

15 Thanks to this characteristic, it is obtained a
container for pizzas and the like made up of a base and lid
that fit together. Therefore, the container of the
invention takes up less space when opened if compared to
currently known pizza containers, as the lid can be removed
20 from the table, or it can even be used as a plate.

Furthermore, thanks to the aforementioned
coupling means, no type of seal is necessary to avoid the
container opening if tilted.

25 Preferently, the aforementioned rim which
defines a C-shape cavity is provided on the base.

Advantageously, both the base and the lid have
sloping walls to make storage easier.

Also advantageously, the lid comprises an
orifice in its sloping wall making it easier to open the
30 container. This way, the container can be opened by
inserting a finger into the orifice and raising the lid.

Another point that makes removing the lid easier
is that the said flange has a cut-out in the area adjacent
to the aforementioned orifice in the sloping wall of the
35 lid.

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To pile up the containers the base comprises a projection complementary with a cavity provided in the lid, or vice versa.

To make it easier to put the lid in place, it comprises a series of cuts in its wall directed towards the centre of the lid.

According to a preferred embodiment, both the base and the lid comprise a layer of corrugated cardboard, thus permitting the container to present thermal insulating properties as well as the desired stiffness.

Advantageously, both the base and the lid comprise an internal layer of anti-grease material and/or an internal layer of thermally insulating material.

Preferently, at least one of the mentioned layers covers the whole of the base and the lid except the rim or the coupling flange to make production of the container easier and to avoid unnecessary waste of material.

To facilitate the storing of the containers, the external edge of the lid coincides substantially with the internal edge of the base, so that the lid is placed upside down inside the base, with the said flange being inserted in said C-shape cavity.

To make it easier to remove the lid from inside the base when they are coupled in the storage or transporting position, when the container of the invention is empty, said rim comprises at least one pair of cuts, each pair of these cuts defining a tongue.

BRIEF DESCRIPTION OF THE DRAWINGS

To better understand all the aforementioned, there are some accompanying drawings which, diagrammatically and only as a non-limitative example, represent a practical embodiment.

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Figure 1 is a perspective view of the base and the lid which form the container of the invention separated one from each other;

Figure 2 is an elevation view of one sectioned end of the container of the present invention, with the base and the lid coupled together;

Figure 3 is an elevation view of two containers of the present invention piled one on top of the other;

Figure 4 shows an elevation view of a container of the present invention sectioned, with the base and the container coupled in their storage and transporting position when empty; and

Figure 5 is an elevation view of two bases of the container of the present invention coupled together for its transporting and storage.

DESCRIPTION OF A PREFERRED EMBODIMENT

As can be appreciated in figures 1 and 2, the container of the present invention is formed by a base 1 and a lid 2 which can be coupled together.

To couple the pieces together, the base 1 comprises a rim 3 along its edge which defines a C-shape cavity 4, while the lid 2 comprises a flange 5 which is fitted into said cavity 4. To make this coupling easier, the lid 2 has a series of cuts 12 distributed around the edge in a suitable way.

To remove the lid 2 an orifice 8 is provided for a finger to be inserted and the lid 2 to be raised. To make opening the container of the invention even easier, the flange 5 comprises a cut-out 9 in the zone adjacent to the said orifice 8.

Therefore, it is obtained a container made up of two pieces, base 1 and lid 2, it being easy to fit and remove the lid 2.

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In figure 2, it can be appreciated in detail the layers which form both the base 1 and the lid 2. In the case of the represented embodiment, the base 1 and the lid 2 have the same number of layers and said layers present of 5 the same characteristics.

Specifically, and according to the represented embodiment, the lid 2 and the base 1 are made from an intermediate layer 13 of corrugated cardboard, which presents characteristics of adequate thermal insulating and 10 stiffness. Furthermore, the base 1 and the lid 2 comprise an internal layer 14 of an anti-grease material and an external layer 15 of a thermally insulating material. To make production of the invented container easier and to avoid unnecessary waste of material, the internal layer 14 15 and the external layer 15 do not cover the rim 3 or the flange 5.

As can be clearly appreciated from figure 3, the containers of the present invention can be piled up one on top of the other. This characteristic is achieved by the 20 provision of a projection 10 in the base 1 complementary with a cavity 11 provided in the lid 2, or vice versa, so that when two containers of the present invention are piled up the said projection 10 is fitted inside the complementary cavity 11.

25 So that the container takes up the least possible space when empty in its storage or transporting position, both the base 1 and the lid 2 have sloping walls 6, 7, so that the internal edge of the base 1 coincides substantially with the external edge of the lid 2, or vice 30 versa. If required, it is also possible to transport and store the lids 2 piled one on top of the other independently of the bases 1, which will also be piled one on top of the other. These storage positions can be appreciated clearly in figures 4 and 5.

35 To make it easier to remove the lid 2 in the

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storage position when the lid 2 is placed upside down on the base 1, there are provided some cuts 16 (figure 1) which define tongues 17. If removal of the lid 2 from the base 1 is required, simply pulling one of the said tongues 17 gives access to the flange 5, which when pulled removes the lid 2.

Although a specific embodiment of the invention has been referred to, it is evident to a person skilled in the art that the described container is susceptible to numerous variations and modifications, and that all the aforementioned details can be substituted by technically equivalent others, without departing from the scope of protection defined by the appended claims.

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<<characterized in that the base and the lid are dish-shaped and in that both the lid and the base are formed of at least one layer of cardboard>>.

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CLAIMS

<pizzas and the like>

1. Container for ~~food~~ which comprises two pieces comprising a base (1) and a lid (2) which can be coupled together, ~~both the lid and the base are formed of at least one layer of sheet material, characterized in that~~ the coupling means between the lid (2) and the base (1) are formed by a rim (3), provided on the edge of one of the pieces of the container, which defines a C-shape cavity (4), into which a complementary flange (5), provided on the edge of the other piece of the container, is fitted, <->

2. Container according to claim 1, characterized in that the said rim (3) which defines a C shape (4) is provided on the base (1).

3. Container according to claim 1, characterized in that both the base (1) and the lid (2) have sloping walls (6, 7).

4. Container according to claim 3, characterized in that the lid (2) comprises an orifice (8) in its sloping wall (7) to make opening the container easier.

5. Container according to claims 3 and 4, characterized in that the said flange (5) present a cut-out (9) in the zone adjacent to said orifice (8) provided on the sloping wall (7) of the lid (2).

6. Container according to anyone of the previous claims, characterized in that the base (1) comprises a projection (10) complementary with a complementary cavity (11) provided on the lid (2), or vice versa.

7. Container according to anyone of the previous claims, characterized in that the lid (2) comprises a series of cuts (12) in its wall (7) directed towards the centre of the lid (2).

8. Container according to anyone of the previous claims, characterized in that both the base (1) and the lid (2) comprise a layer of corrugated cardboard (13).

9. Container according to anyone of the previous claims, characterized in that both the base (1) and the lid (2) comprise an internal layer (14) of anti-grease material.

5 10. Container according to anyone of the previous claims, characterized in that both the base (1) and the lid (2) comprise an external layer (15) of thermally insulating material.

10 11. Container according to the claims 8, 9 and 10, characterized in that said at least one of said layers covers all of the base (1) and all of the lid (2) except the rim (3) or the coupling flange (5).

15 12. Container according to anyone of the previous claims, characterized in that the outside edge of the lid (2) coincides substantially with the internal edge of the base (1), said flange (5) fitting inside said C-shape cavity (4).

20 13. Container according to claim 13, characterized in that it comprises at least a pair of cuts (16) provided on said rim (3), each pair of these cuts (16) defining a tongue (17).